REMARKS/ARGUMENTS

In the Office action dated February 27, 2006, the Examiner rejected claims 19 - 58 under 35 U.S.C. § 103. In an attempt to expedite allowance of this application, Applicant has canceled claims 19 - 58 and added new claims 59 - 88. Reconsideration and reexamination are hereby requested for claims 59 - 88 that are now pending in this application.

The newly cited reference, Morishima, discloses a stereophonic sound producing apparatus for a game machine, comprising input terminals, an electric circuit, and loudspeakers. The input terminals 9, 10 are for receiving left-hand and right-hand background sound signals from a first signal source. The input terminals 11, 12 are for receiving front and rear game sound signals from a second signal source. The input terminals 13, 14 are for receiving left-hand and right-hand control signals from the second signal source. The electric circuit includes buffer amplifiers 23, 25, 27 28, mixers 16, 18, 20, 22, 25, phase shifters 24, 26, attenuators 29, 30, a low pass filter 36 and power amplifiers 15, 17, 19 , 21, 37. The loudspeakers 4, 5 are for front left-hand and right-hand sounds. The loudspeakers 6, 7 are for rear left-hand and right-hand sounds. The woofer 3 is for low frequency sound. See Figure 2 and the description at column 2.

In Morishima, front left-hand and right-hand sounds are produced by mixing a front game sound with the left-hand and the right-hand background sounds, respectively. Rear left-hand and right-hand sounds are produced by mixing an attenuated rear game sound with phase shifted left-hand and right-hand background sounds, respectively. See Figure 2 and the description at column 2. Accordingly, Morishima only discloses the above mixture, phase shifting, and attenuation of the four signals which are input to the apparatus.

Morishima neither discloses nor relates to an audio system for or a method of reproducing six independent original audio signals, where the signals are a central signal, left and front signals, left and rear signals and a bass signal in the manner set forth in independent claims 59, 66, 74 and 81. Moreover, Morishima does not teach or suggest delaying and attenuating one of the front signals to produce a first processed signal and adding the first processed signal to one of the rear signals, and delaying and attenuating one of the rear signals to produce a second

processed signal and adding the second processed signal to one of the front signals, in the manner set forth in independent claims 59 and 74. Furthermore, Morishima does not teach or suggest adding front signals to make a first added signal, delaying and attenuating the first added signal to produce a first processed signal and adding the first processed signal to the rear signals; and adding rear signals to make a second added signal, delaying and attenuating the second added signal to produce a second processed signal and adding the second processed signal to the front signals, in the manner set forth in independent claims 66 and 81.

Hoellermann discloses a production of a pseudo-4-channel stereo system from 2-channel stereo signals. Hoellermann thus does not teach or suggest an audio system for or a method of reproducing six independent original audio signals as discussed above. Moreover, Hoellermann does not teach or suggest adding the signals as discussed above.

Kuusama discloses a home theater system wherein signals are delayed and level controlled by a delay and level control unit to enable a small speaker to reproduce bass signal. A low frequency sound signal produced from the channel signals is added to each of the channel signals. Kuusama does not teach or suggest adding the signals in the manner specifically claimed in independent claims 59, 66, 74 and 81.

Accordingly, the references cited in the Office action, considered either independently or in combination, do not disclose all of the elements of the independent claims.

Moreover, one skilled in the art would not have been motivated to incorporate the device of Hoellermann into the apparatus of Morishima. Hoellermann discloses a device that purports to optimize reproduction for different seat positions in a car whereby, through the use of a switch, the reproduction may be selectively changed to be optimum for a given seat. In contrast, Morishima discloses a game device where the positions of the seat and speakers are fixed. There would not have been motivation to incorporate the more expensive and complicated device that provides for optimum sound at multiple seat position as disclosed in Hoellermann into the fixed apparatus disclosed by Morishima.

One skilled in the art also would not have been motivated to incorporate the system of Kuusama into the apparatus of Morishima. Kuusama is directed to a system that does not have a

speaker that is capable of producing low frequency sounds. In contrast, the apparatus of Morishima has a woofer 3.

In view of the above, Applicant respectfully submits that the independent claims are not obvious in view of the cited references considered either separately or in combination. Accordingly, Applicant submits that the independent claims are patentable over these references.

The dependent claims also are patentable over the cited references for the reasons set forth above. In addition, these dependent claims are patentable over these references for the additional limitations that the dependent claims contain.

CONCLUSION

In view of the above it is submitted that the claims are patentably distinct over the cited references and that all the rejections to the claims have been overcome. Reconsideration and reexamination of the above application is respectfully requested.

Respectfully submitted,
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